

CENAB-EN-M\_

(Date)

### SCOPE OF ARCHITECT-ENGINEER SERVICES

\_\_\_\_\_  
(Project Title)

\_\_\_\_\_  
(Installation)

\_\_\_\_\_  
(FY)

\_\_\_\_\_  
(Fund Type)

\_\_\_\_\_  
(PN)

#### BACKGROUND:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

#### PROJECT SCOPE:

In general terms, the project consists of \_\_\_\_\_

\_\_\_\_\_ in accordance with DD Form 1391 dated \_\_\_\_\_.

Significant major project features are \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ A pre-negotiation conference was held  
at which the following specific requirements were identified:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

#### ESTIMATED CONSTRUCTION COST:

\$\_\_\_\_\_, based on an assumed date of start of construction  
of \_\_\_\_\_ and escalated to the mid-point of construction. The  
Architect-Engineer contractor (AE) shall be responsible to design  
within this cost. This cost shall be an estimate of the  
construction contractor's bid and is referred to as the Current

Construction cost estimate (CCE). If the AE is not able to maintain this cost, the AE shall report this immediately to Baltimore District design manager (DM).

**AE SERVICES:**

The AE shall provide all necessary services required to prepare complete and biddable construction contract documents for the subject project. Design documents will be sufficiently detailed to permit construction contractors to submit responsive bids without visiting the project site during bidding. See Instructions for the Designer (Instructions) of the contract for general requirements. Specific phases of AE services are as follows:

a. Topographic Survey: The AE (is)(is not) required to perform a topographic survey and plot the data.

b. Geotechnical Investigation: Drilling, testing, and producing design analyses of earth foundations and the design of pavement sections shall be performed by the (government)(AE). The structural design shall be performed by the AE.

c. Field Investigation: The AE shall:

1. Visit the project site to determine existing and planned future conditions affecting the project design,

2. Obtain all necessary dimensional, utility, physical, and functional data,

3. Verify all applicable as-built drawings and determine any relevant existing conditions not available on existing as-built drawings,

4. Interview the user/occupant to obtain detailed functional requirements,

5. Obtain the special job conditions for inclusion in the specifications including security, working hours, hauling routes, disposal areas, staging areas, and utility interruptions.

The AE will immediately advise the DM if any hazardous materials or situations are observed during the field investigations.

d. Field Investigation Report: The field investigation report shall consist of this scope of AE services, a summary of the field investigation findings, general discussion of design solutions, simple sketches and a brief budgetary cost estimate. All components shall be bound as a single volume in 8 (1/2)" x 11" format.

e. Study: Describe alternatives developed as design solutions. Include a cost estimate of each alternative. Discuss advantages and disadvantages of each alternative. Prepare drawings and/or sketches to illustrate details of the study. Recommend one alternative for design.

f. Concept (30%) Design: The concept submission shall consist of drawings reproduced to size of approximately 15" x 21" (half-size) for all but Baltimore Site Development Section review, outline specifications, design analysis, summary of field investigation findings, this Scope of AE services, life cycle cost analyses (LCCA), construction cost estimate, and bar chart schedule supporting the estimated construction duration. The specifications, design analysis, field investigation findings, Scope of Services, and LCCA shall be bound in one volume. The concept design shall be complete to thoroughly express the designer's intentions, define all major systems and materials, and provide a firm basis for estimating the cost of the project.

g. Preliminary (60%) Design (Option): The preliminary submission shall consist of the preliminary drawings reproduced to size of approximately 15" x 21" (half-size) for all but the Baltimore Site Development Section review, outline Divisions 2-16 specifications, draft Division 1 specifications (administrative requirements), preliminary design analysis, preliminary cost estimate, updated bar chart of estimated construction duration, communications design in response to review by the Information Systems Engineering Command, and replies to concept review comments. The specifications, design analysis, and Scope of Services shall be bound in one volume.

h. Final Design for Review (Option): The final submission shall consist of the drawings reproduced to size of approximately 15" x 21" (half-size) for all but the Baltimore Site Development Section review for which a full size set shall be provided, design analysis, construction cost estimate, FIP data analysis, marked-up specifications (Division 1 through 16), submittal register, updated bar chart of estimated construction duration, communications design in response to review by the Information Systems Engineering Command, replies to previous review comments, and DD Form 1354 "Transfer and Acceptance of Military Property".

i. Backcheck Submittal (Part of the Final Design Option): The backcheck submission shall consist of the drawings reproduced to size of approximately 15" x 21" (half-size) for all but the Baltimore Site Development Section review for which a full size set shall be provided, design analysis, construction cost estimate, FIP data analysis, final typed specifications (Division 1 through 16), submittal register, updated bar chart of estimated construction duration, communications design in response to

review by the Information Systems Engineering Command, replies to previous review comments, and DD Form 1354 "Transfer and Acceptance of Military Property."

j. Original Documents (Part of the Final Design Option): The original document submission shall consist of original signed and sealed drawings, original specifications, original submittal register, original construction cost estimate with backup data and sources, FIP data analysis, original design analysis, DD Form 1354, CADD disks, and responses to final design review comments. Also included shall be the number of copies of all original documents (drawings to be half-size) listed in the Review Distribution List.

Note: The design shall be performed using a Computer-Aided-Design-and-Drafting (CADD) system of the AE's choice. However, the designer shall provide the final design products in the customer's CADD format which is \_\_\_\_\_. The AE shall provide the requisite digitizing or translation services necessary.

k. Value Engineering (VE) Assistance (option): The AE shall provide three additional copies of all concept submission documents to the design manager. See Instructions for assistance requirements.

l. Other Services (e.g., NCPC Submission, color boards, renderings, models).

m. Construction Phase Services (option):

1. Review of Shop Drawings: \_\_\_\_ shop drawing items will require review. Estimated duration of review is \_\_\_\_ hours per item. Due to contractor errors, a resubmission rate of \_\_\_\_% is anticipated. See Instructions for details of providing this service.

2. Site Visits during Construction: \_\_\_\_ site visits will be required during construction of the project. See Instructions for details of providing this service.

3. Technical Assistance: The AE shall provide technical assistance to the Area/Resident Engineer and his staff, as requested in writing, for the duration of the construction period. This assistance will include, but not be limited to, the following tasks:

(1) Review special construction techniques, methods, and procedures and annotate available documentation to provide recommendations for approval or disapproval.

(2) Review, evaluate, and provide construction time and cost impacts for User requested changes.

(3) Review Contractor Value Engineering Proposals and provide comments and/or recommendations for approval or disapproval.

(4) Respond to requests for information to assist the Area/Resident Engineer.

Note: Negotiated options may be exercised by the Government within 210 days of the acceptance of the work previously required under this contract.

Note: Participation in the Automated Review Management System (ARMS). See Instructions for additional requirements.

**SCHEDULE:**

a. Field Investigation Report: Submit within \_\_\_\_ calendar days after date of receipt of order.

b. Study: Submit within \_\_\_\_ calendar days after date of receipt of order.

c. Concept Design (30%): Submit within \_\_\_\_ calendar days after date of receipt of order.

d. Preliminary Design (60%): Submit within \_\_\_\_ calendar days (after receipt of concept design review comments) (after date of receipt of the executed modification for final design).

e. Final Design: Submit within \_\_\_\_ calendar days (after receipt of concept (preliminary) design review comments) (after date of receipt of the executed modification for final design).

f. Backcheck submittal: Submit within \_\_\_\_ calendar days of receipt of final comments.

g. Original Documents: Submit within \_\_\_\_ calendar days of receipt of backcheck comments.

**SUBMITTALS:**

The reviewers for this project and the distribution of review copies for each submittal are shown on the Review Distribution List. The transmittal letter to the DM will also be used to forward the other review copies by indicating "copies furnished according to the attached list" in the letter and attaching the

enclosed list. Highlight in yellow marker the recipient of each submittal package and the note at the bottom of the Review Distribution List regarding the time period for review. Contact the DM for the correct review duration prior to distribution of the submittals.

**SPECIAL CRITERIA AND INSTRUCTIONS:**

---

---

---

---

---

---

---

**GOVERNMENT-FURNISHED DATA:**

---

---

---

---

---

---

---

**POINTS OF CONTACT:**

Baltimore District Design Manager:

\_\_\_\_\_

Phone: (410) 962-\_\_\_\_ Facsimile Copier: (410) 962-\_\_\_\_

Contracting Officer's Representative:

\_\_\_\_\_

Phone: (410) 962-\_\_\_\_

Installation Point-of-Contact:

\_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_

**ENCLOSURES:**

Review Distribution List  
Instructions for the Designer, 5 February 1998.